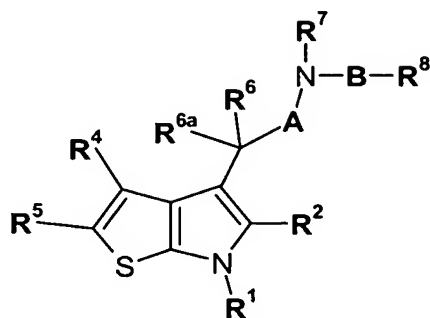


**In the Claims:**

The listing of claims will replace all prior versions and listings of claims in the application.

**Listings of claims:**

1. (Original) A compound of Formula (I),

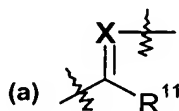


Formula (I)

wherein

A represents a direct bond or optionally substituted  $C_{1-5}$ alkylene;

B is a group of Formula (II):



Formula (II);

wherein at position (a) Formula (II) is attached to the nitrogen atom and the group X is attached to  $R^8$ ;

$R^1$  represents hydrogen; optionally substituted  $C_{1-8}$ alkyl; or  $(CH_2)_b-R^a$ ,

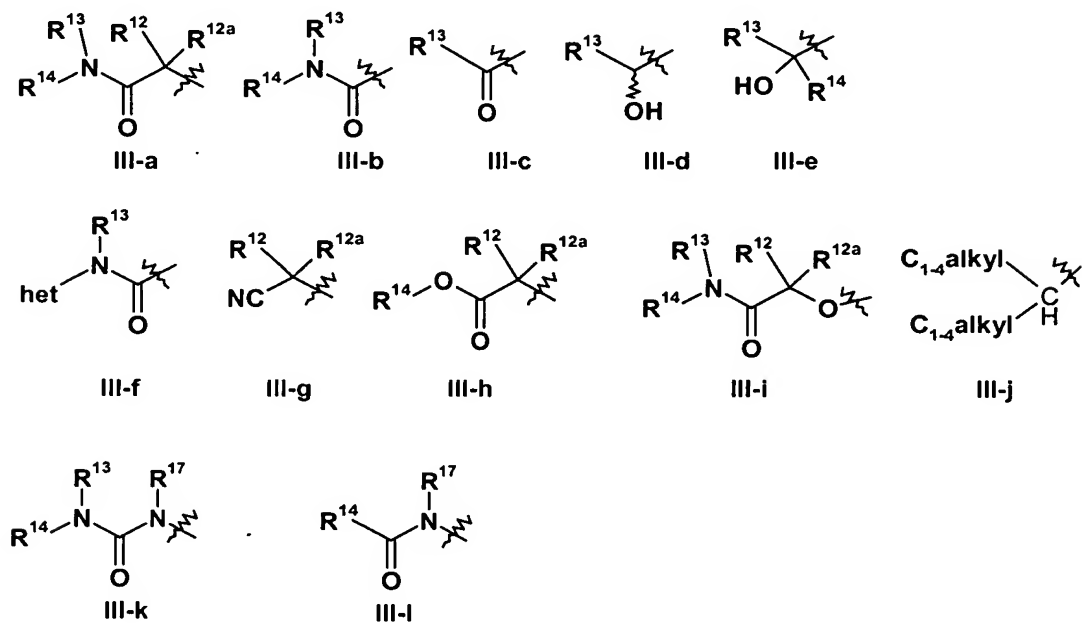
wherein  $R^a$  represents  $C_{3-8}$ cycloalkyl and b is zero or an integer from 1 to 6;

$R^2$  represents an optionally substituted mono- or bi-cyclic aromatic ring structure wherein the optional substituents are selected from cyano,  $NR^3R^{3a}$ , optionally substituted  $C_{1-8}$ alkyl, optionally substituted  $C_{1-8}$ alkoxy or halo;

$R^3$  and  $R^{3a}$  are independently selected from hydrogen; optionally substituted  $C_{1-8}$ alkyl and optionally substituted aryl;

$R^4$  is hydrogen;

$R^5$  is selected from an optionally substituted 3- to 8- membered heterocyclic ring containing from 1 to 4 heteroatoms independently selected from O, N and S; or a group of formula III-a; III-b; III-c; III-d; III-e; III-f, III-g, III-h, III-i, III-j, III-k or III-l;



wherein **het** represents an optionally substituted 3- to 8- membered heterocyclic ring containing from 1 to 4 heteroatoms independently selected from O, N and S;

$R^6$  and  $R^{6a}$ , are independently selected from hydrogen and optionally substituted  $C_{1-8}$ alkyl; or  $R^6$  and  $R^{6a}$  together represent carbonyl;

$R^7$  represents hydrogen or optionally substituted  $C_{1-8}$ alkyl;

or  $R^6$ —**A**— $N$ — $R^7$  together form an optionally substituted 3- to 8- membered heterocyclic ring containing from 1 to 3 further heteroatoms

independently selected from O, N and S, and  $R^{6a}$  represents hydrogen and optionally substituted  $C_{1-8}$ alkyl;

$X$  and  $R^8$  are selected from:

- (i)  $X$  represents N and  $R^8$  is selected from:  
cyano, hydrogen, hydroxy,  $-O-R^b$ ,  $-C(O)-R^b$ ,  $-NR^bR^c$ ,  $-C(O)O-R^b$ ,  $-CONR^bR^c$  or  $NH-C(O)-R^b$ , where  $R^b$  and  $R^c$  are independently selected from hydrogen and  $C_{1-4}$ alkyl optionally substituted with hydroxy, amino,  $N-C_{1-4}$ alkylamino,  $N,N$ -di- $C_{1-4}$ alkylamino,  $HO-C_{2-4}$ alkyl-NH- or  $HO-C_{2-4}$ alkyl- $N(C_{1-4}$ alkyl)-;
- (ii)  $X$  represents CH and  $R^8$  represents  $NO_2$ ; and
- (iii)  $=X-R^8$  represents  $=O$ ;

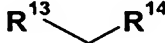
$R^{11}$  is a group of the formula:  $N(R^9R^{10})$  wherein  $R^9$  represents hydrogen, optionally substituted aryl, an optionally substituted 3- to 10 membered heterocyclic ring or optionally-substituted  $C_{1-8}$ alkyl and  $R^{10}$  represents hydrogen or optionally substituted  $C_{1-8}$ alkyl; or

the structure  $N(R^9R^{10})$  represents an optionally-substituted 3- to 10 membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S;

$R^{12}$  and  $R^{12a}$  are independently selected from hydrogen or optionally substituted  $C_{1-8}$ alkyl; or  $R^{12}$  and  $R^{12a}$  together with the carbon to which they are attached form an optionally substituted 3 to 7-membered cycloalkyl ring;

$R^{13}$  and  $R^{14}$  are selected from:

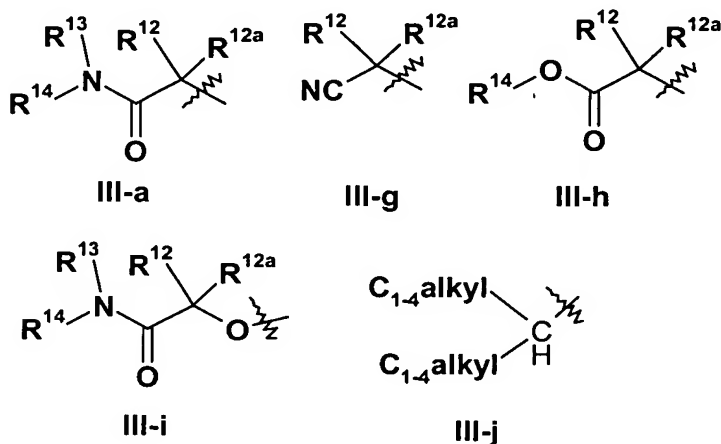
- (i)  $R^{13}$  is selected from hydrogen; optionally substituted  $C_{1-8}$ alkyl; optionally substituted aryl;  $-R^d$ -Ar, where  $R^d$  represents  $C_{1-8}$ alkylene and Ar represents optionally substituted aryl; and optionally substituted 3- to 8- membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S; and  $R^{14}$  is selected from hydrogen; optionally substituted  $C_{1-8}$ alkyl and optionally substituted aryl;

- (ii) where  $R^5$  represents a group of formula **III-a**, **III-b**, **III-i** or **III-k**, then the group  $NR^{13}(-R^{14})$  represents an optionally substituted 3- to 8-membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S; or
- (iii) where  $R^5$  represents structure **III-e**, then the group  represents an optionally substituted 3- to 8- membered heterocyclic ring optionally containing from 1 to 4 heteroatoms independently selected from O, N and S;  
 $R^{17}$  is selected from: hydrogen and  $C_{1-4}$ alkyl;  
 or a salt, pro-drug or solvate thereof.
2. (Original) A compound according to Claim 1 wherein  $R^9$  represents hydrogen, optionally substituted aryl, an optionally substituted 3- to 10 membered heterocyclic ring or optionally-substituted  $C_{1-8}$ alkyl and  $R^{10}$  represents hydrogen or optionally substituted  $C_{1-8}$ alkyl wherein the optional substituents on aryl, the heterocyclic ring and  $C_{1-8}$ alkyl are selected from: hydroxy, amino, nitro, cyano, optionally-substituted aryl, optionally substituted 3- to 8- membered heterocyclyl containing from 1 to 4 heteroatoms independently selected from O, N and S,  $-O-R^b$ ,  $C(O)NR^bR^c$ ,  $-NR^bR^c$ ,  $-NR^cC(O)-R^b$ ,  $-C(O)NR^bR^c$ ,  $-NR^cS(O_{0-2})R^b$ ,  $-S(O_{0-2})R^b$ , wherein  $R^b$  and  $R^c$  are as defined in Claim 1.
3. (Original) A compound according to Claim 2 wherein  $R^9$  is a  $C_{1-6}$ alkyl group substituted by pyridyl, thienyl, piperidiny, imidazolyl, triazolyl, thiazolyl, pyrrolidinyl, piperazinyl, morpholinyl, imidazoliny, benztriazolyl, benzimidazolyl, pyrimidinyl, pyrazinyl, pyridazinyl, oxazolyl, furanyl, pyrrolyl, 1,3-dioxolanyl or 2-azetiny, each of which is optionally substituted as defined in Claim 2.

4. (Original) A compound according to Claim 1 wherein the structure  $N(R^9R^{10})$  represents an optionally-substituted 3- to 10 membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S.
  
5. (Original) A compound according to Claim 4 wherein the 3- to 10 membered heterocyclic ring is optionally substituted by one of more groups selected from  $R^{15}$  wherein  
 $R^{15}$  represents the group  $R^{15a}-Z-$  wherein  
 $R^{15a}$  is selected from optionally substituted aryl, an optionally substituted 3- to 10 membered heterocyclic ring or optionally substituted  $C_{1-4}$ alkyl and  
 $Z$  is selected from a direct bond,  $-(CH_2)_{s1}-$ ,  $-(CH_2)_{s1}-O-(CH_2)_{s2}-$ ,  
 $-(CH_2)_{s1}-C(O)-(CH_2)_{s2}-$ ,  $-(CH_2)_{s1}-S(O_n)-(CH_2)_{s2}-$ ,  $-(CH_2)_{s1}-N(R^{18})-(CH_2)_{s2}-$ ,  
 $-(CH_2)_{s1}-C(O)N(R^{18})-(CH_2)_{s2}-$ ,  $-(CH_2)_{s1}-N(R^{18})C(O)-(CH_2)_{s2}-$ ,  
 $-(CH_2)_{s1}-N(R^{18})C(O)N(R^{18})-(CH_2)_{s2}-$ ,  $-(CH_2)_{s1}-OC(O)-(CH_2)_{s2}-$ ,  
 $-(CH_2)_{s1}-C(O)O-(CH_2)_{s2}-$ ,  $-(CH_2)_{s1}-N(R^{18})C(O)O-(CH_2)_{s2}-$ ,  
 $-(CH_2)_{s1}-OC(O)N(R^{18})-(CH_2)_{s2}-$ ,  $-(CH_2)_{s1}-OS(O_n)-(CH_2)_{s2}-$ , or  
 $-(CH_2)_{s1}-S(O_n)-O-(CH_2)_{s2}-$ ,  $-(CH_2)_{s1}-S(O)_2N(R^{18})-(CH_2)_{s2}-$ ,  
 $-(CH_2)_{s1}-N(R^{18})S(O)_2-(CH_2)_{s2}-$ ; wherein  
the  $-(CH_2)_{s1}-$  and  $-(CH_2)_{s2}-$  groups are independently optionally substituted by hydroxy or  $C_{1-4}$ alkyl and  $s1$  and  $s2$  are independently an integer from 0 to 2, wherein  $s1+s2$  is less than or equal to 2 and  
 $R^{18}$  is selected from hydrogen or  $C_{1-4}$ alkyl;  
wherein the optional substituents on aryl, a heterocyclic ring or  $C_{1-4}$ alkyl are selected from: hydroxy, amino, nitro, cyano, optionally-substituted aryl, optionally substituted 3- to 8- membered heterocyclyl containing from 1 to 4 heteroatoms independently selected from O, N and S,  $-O-R^g$ ,  $-C(O)-R^g$ ,  $-C(O)NR^gR^h$ ,  $--NR^gR^h$ ,  $-NR^hC(O)-R^g$ ,  $-C(O)NR^gR^h$ ,  $-NR^hS(O_{0-2})R^g$ ,  $-S(O_{0-2})R^g$ , wherein  $R^g$  and  $R^h$  are independently selected from: heterocyclyl, hydrogen and  $C_{1-4}$ alkyl optionally substituted with hydroxy, amino,

N-C<sub>1-4</sub>alkylamino, N,N-di-C<sub>1-4</sub>alkylamino, HO-C<sub>2-4</sub>alkyl-NH- or HO-C<sub>2-4</sub>alkyl-N(C<sub>1-4</sub>alkyl)-.

6. (Original) A compound according to Claim 5, wherein Z is selected from a direct bond or carbonyl.
7. (Currently Amended) A compound according to claim 1 ~~any one of the preceding claims~~ wherein R<sup>5</sup> is selected from a group of formula III-a , III-g, III-h, III-i or III-j:

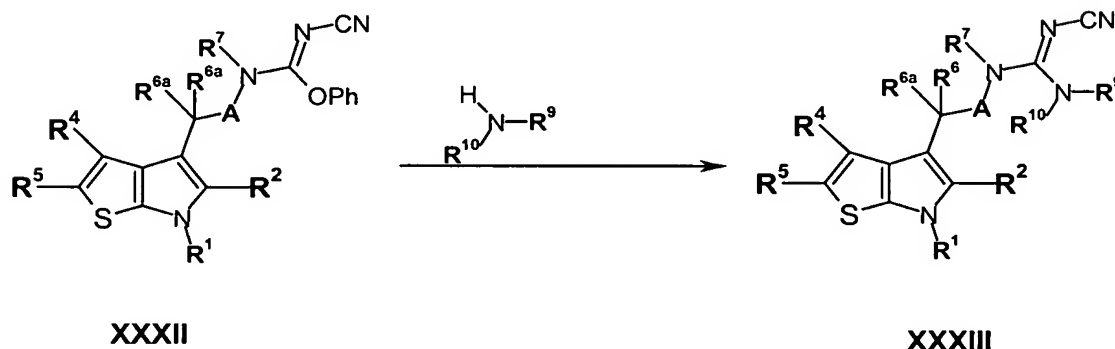


8. (Currently Amended) A compound according to claim 1 ~~any one of the preceding claims~~ wherein:
  - (a) X represents N and R<sup>8</sup> represents cyano or -C(O)O-R<sup>b</sup>; wherein R<sup>b</sup> is as defined in Claim 1, or
  - (b) X represents N and R<sup>8</sup> represents hydrogen.
9. (Currently Amended) A compound according to claim 1 ~~any one of the preceding claims~~ wherein R<sup>2</sup> is selected from an optionally substituted monocyclic aromatic ring structure wherein the optional substituents are selected from cyano, NR<sup>e</sup>R<sup>f</sup>, optionally substituted C<sub>1-8</sub>alkyl, optionally

substituted C<sub>1-8</sub>alkoxy or halo wherein R<sup>e</sup> and R<sup>f</sup> are independently selected from hydrogen, C<sub>1-6</sub>alkyl or aryl.

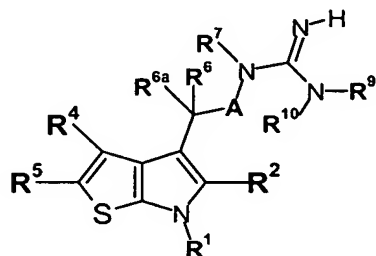
10. (Currently Amended) A compound according to claim 1 ~~any one of the~~ preceding claims wherein R<sup>1</sup> is hydrogen.
11. (Original) A compound selected from:
- 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-  
4-[1S-methyl-2-(N'-isopropoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-ylcarboxi  
midamido) ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
- 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-  
4-[2-(N'-isopropoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-ylcarboximidamido)  
ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
- 2-(2-pyrrolidin-1-yl-1,1-dimethyl-2-oxoethyl)-  
4-[1S-methyl-2-(N'-isopropoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-ylcarboxi  
midamido) ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
- 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-  
4-[1S-methyl-2-(N'-isopropoxycarbonyl-4-tetrahydropyran-4-yl-  
piperidin-1-ylcarboximidamido)ethyl]-5-(3,5-dimethylphenyl)--6*H*-  
thieno[2,3-*b*]pyrrole;
- 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-  
4-[1S-methyl-2-(3-pyrid-4-yl-pyrrolidin-1-ylcarbonyl)ethyl]-5-(3,5-  
dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
- 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-  
4-[1S-methyl-2-(N'-ethoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-yl  
carboximidamido) ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;  
or a salt, pro-drug or solvate thereof.

12. (Cancelled)
13. (Currently amended) A pharmaceutical formulation comprising a compound, or salt, pro-drug or solvate thereof, according to claim 1 ~~any one of Claims 1 to 11~~ and a pharmaceutically acceptable diluent or carrier.
14. (Currently amended) A method of antagonising gonadotropin releasing hormone activity, the method comprising administering ~~Use of a compound~~ according to claim 1, or salt, pro-drug or solvate thereof, to a patient ~~according to any one of Claims 1 to 11, in the manufacture of a medicament for administration to a patient, for therapeutically treating and/or preventing a sex hormone related condition in the patient.~~
15. (Currently amended) A process of producing a compound, or salt, pro-drug or solvate thereof, according to claim 1 ~~any one of Claims 1 to 11~~, wherein the process comprises a reaction step selected from any one of steps (a) to (f):-
- (a) Reaction of a compound of formula **XXXII** as follows



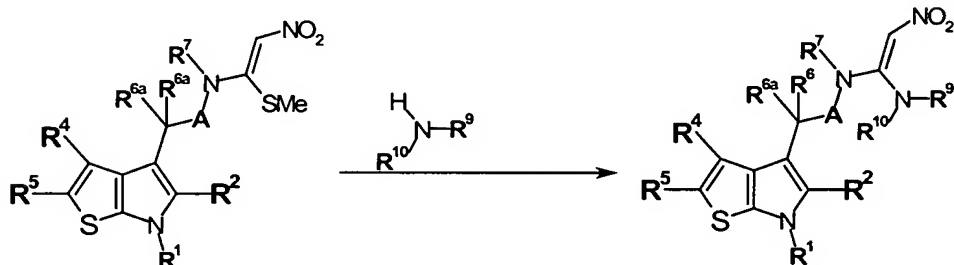


- (b) Cleavage of the cyano group of a compound of formula **XXXIII** in the presence of acid to produce a compound of formula **XXXIV**



**XXXIV**

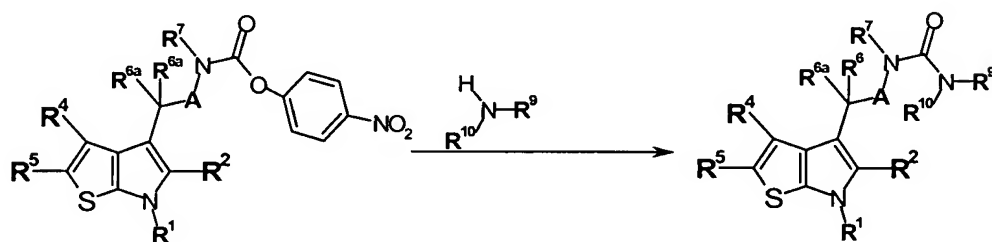
- (c) Reaction of a compound of formula **XXXV** as follows



**XXXV**

**XXXVI**

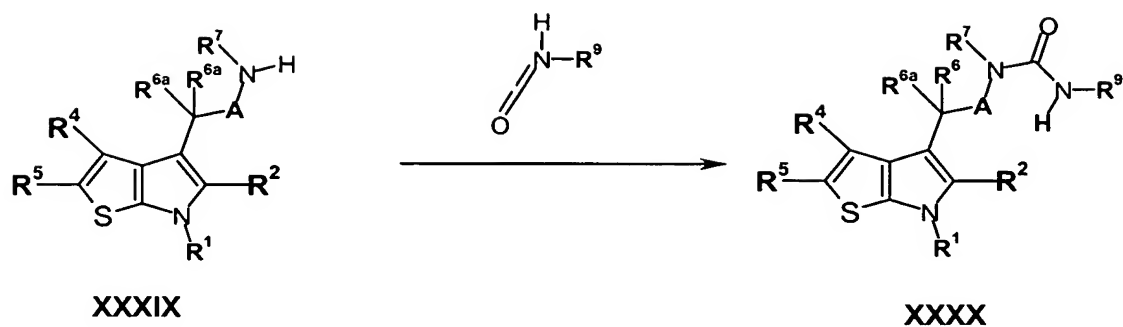
- (d) Reaction of a compound of formula **XXXVII** as follows



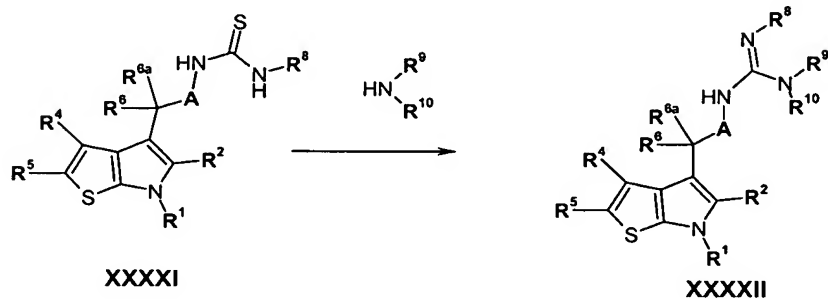
**XXXVII**

**XXXVIII**

- (e) Reaction of a compound of formula **XXXIX** as follows



(f) to form a compound wherein X is nitrogen and Reaction of a compound of formula XXXXI as follows



and thereafter if necessary:

- i) converting a compound of the Formula (I) into another compound of the Formula (I);
- ii) removing any protecting groups;
- iii) forming a salt, pro-drug or solvate.